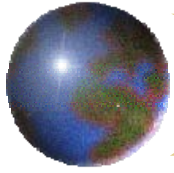


*California Debt and
Investment Advisory Commission:
Ongoing Debt Administration Seminar*

Why Refund?

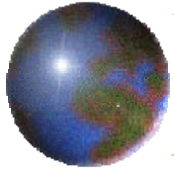


Gary Hall
Vice President
J.P. Morgan Securities Inc.



Agenda

1. Why Consider Refunding?
2. How to Execute a Refunding
3. Basic Refunding Issues
 - a. Defeasance Techniques
 - b. Escrow
 - c. Legal Ramifications
 - d. Refunding Bond Structures



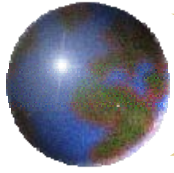
Why Consider a Refunding?



Why Refund? Debt Service Savings

- A traditional refunding in a lower interest rate environment enables an issuer to save money today by refinancing prior debt issued at higher interest rates
- Issuers often have different threshold levels of savings that must be met prior to undertaking a refunding
- Similar to refinancing a home mortgage

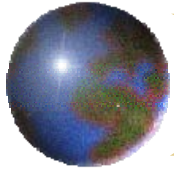




Example: Refinancing Home Mortgage

- You applied for and received a \$500,000 30-year home mortgage in 2000
- Let's assume the bank that supplied you with the mortgage gave you a set interest rate of 6.50%
- The bank determined your interest rate based on the current market, your credit and your income
- Since 2000, interest rates have declined and you decide to refinance your home mortgage to take advantage of the lower interest rates
- You apply for a refinancing and the bank sets a new interest rate based upon the current market environment and your current credit and income profile
- The bank offers you a new mortgage rate of 5.00% on the remainder of your mortgage principal
- *You save 1.50% of interest a year for the remaining term of your mortgage*





Example: Refinancing Home Mortgage

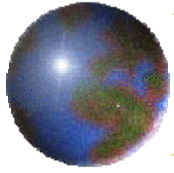
- If the refinancing of the 6.50% mortgage to 5.00% mortgage takes place on 5/1/2007, mortgage interest payments at that point decreases from about \$2,400 to \$1,800 a month (savings change as principal amortizes annually)
- Cash flow savings from this refinancing is approximately \$140,000

Original Mortgage Payments

Date	Principal	Interest	Debt Service
06/01/2006	10,000	2,546	12,546
07/01/2006	-	2,492	2,492
08/01/2006	-	2,492	2,492
09/01/2006	-	2,492	2,492
10/01/2006	-	2,492	2,492
11/01/2006	-	2,492	2,492
12/01/2006	-	2,492	2,492
01/01/2007	-	2,492	2,492
02/01/2007	-	2,492	2,492
03/01/2007	-	2,492	2,492
04/01/2007	-	2,492	2,492
05/01/2007	-	2,492	2,492
06/01/2007	10,000	2,492	12,492
07/01/2007	-	2,438	2,438
08/01/2007	-	2,438	2,438
09/01/2007	-	2,438	2,438
....
....
....
06/01/2030	35,000	190	35,190

Mortgage Payments After Refinancing

Date	Principal	Interest	Debt Service
....
....
....
05/01/2007	-	1,854	1,854
06/01/2007	10,000	1,854	11,854
07/01/2007	-	1,813	1,813
08/01/2007	-	1,813	1,813
09/01/2007	-	1,813	1,813
....
....
....
06/01/2030	30,000	125	30,125



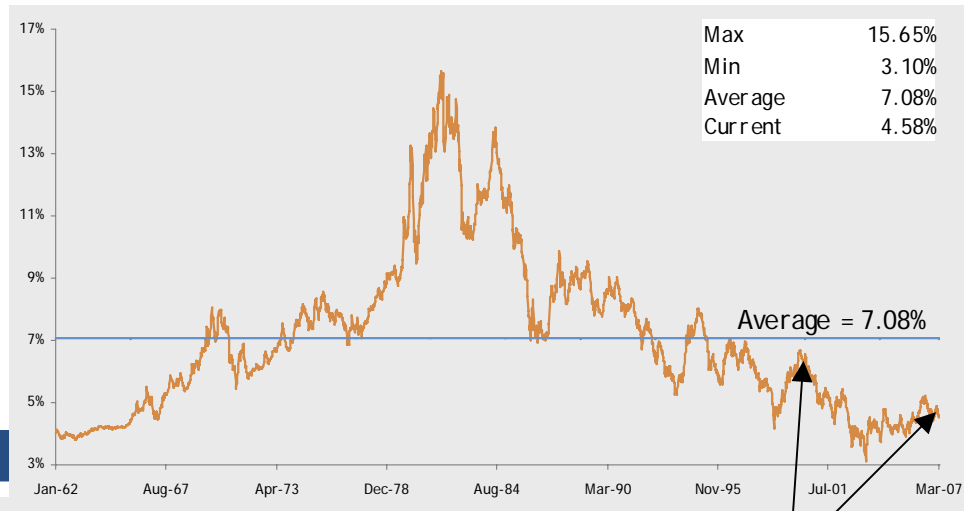
Why Consider a Refunding?



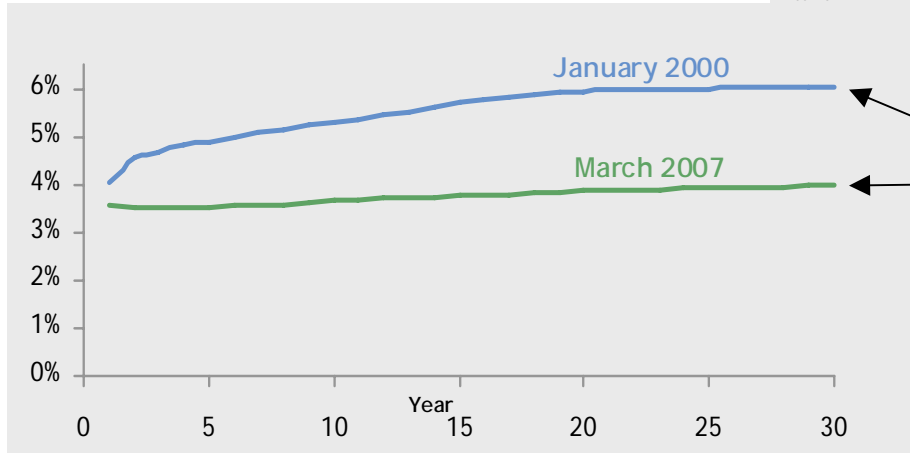
Market Impact on Refunding

- Today's tax-exempt interest rate market is characterized by low long-term rates and a flat yield curve
- This confluence of low rates and flat yield curve is extremely rare

10-Year US Treasury Rates¹

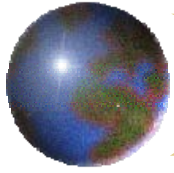


AAA MMD Yield Curve Comparison¹



Comparing the market environment in 2000 versus today, we see that interest rates are lower today and long-term rates are nearly the same as short-term rates. This makes refinancing debt today attractive for achieving savings.

¹ Rates as of March 19, 2007.



Why Consider a Refunding?



Why Refund? Debt Service "Re-Shaping"

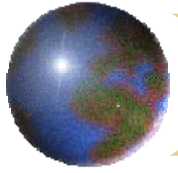
- Restructure debt for cash flow or budgetary management
- Reasons for extending existing debt service
 - Budgetary changes
 - Yield curve changes
 - Upfront cash flow relief



Existing and Refunding Debt Service



For example, if you decide you want some relief from paying off the principal of your mortgage for the next few years, your mortgage can be refinanced under a new structure such that you only pay interest on the mortgage for the first few years before the principal starts to amortize. While future principal payments will be slightly higher each year, you get the benefit of upfront cash flow relief.

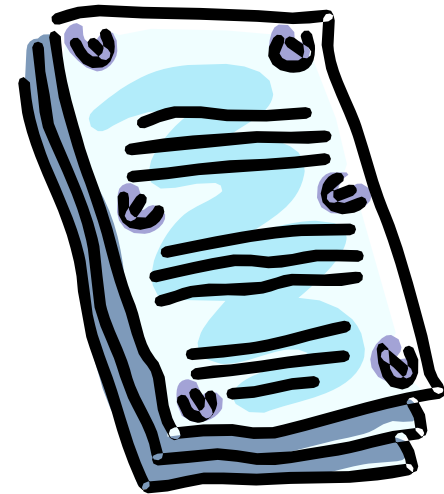


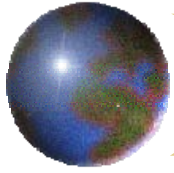
Why Consider a Refunding?



Why Refund? Remove or Replace Existing Covenants

- Refundings can provide opportunities to update indenture covenants
 - May require defeasing all outstanding bonds
- Older indentures are sometimes more restrictive and less flexible than newer versions on topics such as:
 - Assumptions for variable rate debt (multi-modal documents, auction rate securities)
 - Assumptions for interest rate swaps
 - Debt Service Reserve Fund requirements
 - Payment and maturity dates that better match issuer's cash flows
 - Flow of funds
 - Valuation of fund accounts and releasing assets



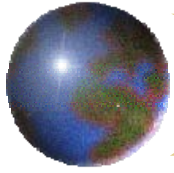


Why Consider a Refunding?



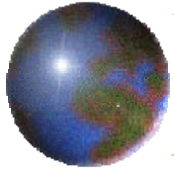
Refunding Without Savings

- Sometimes a refunding is done even with dis-savings
- Reasons for refunding without savings in a less favorable market environment include:
 - Need for debt service relief due to low cash flow
 - Desire to change structure of bonds for debt portfolio purposes
 - Refunding non-callable bonds for debt defeasance
 - Required redemption of bonds due to change in use



Agenda

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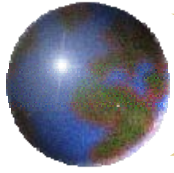


How to Execute a Refunding?



Steps to Execute a Refunding

- Determine refundability of existing bonds
 - What is the call date of the bonds?
 - Can the bonds be “current” or “advance” refunded?
- Sell new refunding bonds
 - New bonds often mirror the structure and maturity schedule of the outstanding bonds
 - New bonds may be structured in a different way than prior bonds, with a shorter or longer maturity schedule
- Use bond proceeds to buy securities whose receipts match defeasance requirements - “escrow”
 - If escrow is 90 days or less, it is defined as a “current refunding”
 - If escrow is more than 90 days, it is an “advance refunding”
- After closing of refunding transaction, commence debt service on new refunding bonds



How to Execute a Refunding?



Bond Redemption

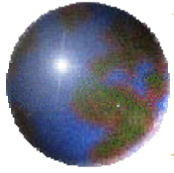
- The Official Statements of bond issues will state the optional redemption call date(s) (if any) a bond series has and the redemption price(s)
- In the example below, the bonds are first callable on 12/1/2009 at a premium price of 101%
- The redemption price decreases as you move farther away from the initial call date
- Some bonds can be initially redeemed at par
- A refunding within 90 days of the first call date is a current refunding while a refunding more than 90 days from the first call date is an advance refunding

Sample Redemption Language

Optional Redemption.

The Bonds maturing on and after December 1, 2010 are subject to redemption prior to their respective stated maturities, as a whole or in part on any date on or after December 1, 2009, from any prepayments made by the Center to the Trustee pursuant to the Loan Agreement, provided in each case that the maturity or mandatory sinking fund payment date and amount of Bonds to be redeemed from the amount so prepaid and the redemption date shall be as specified by the Center, at the following redemption prices (expressed as a percentage of the principal amount to be redeemed) plus accrued interest, if any, to the date of redemption:

Redemption Period (Dates Inclusive)	Redemption Price
December 1, 2009 to November 30, 2010	101%
December 1, 2010 to November 30, 2011	100.5
December 1, 2011 and thereafter	100

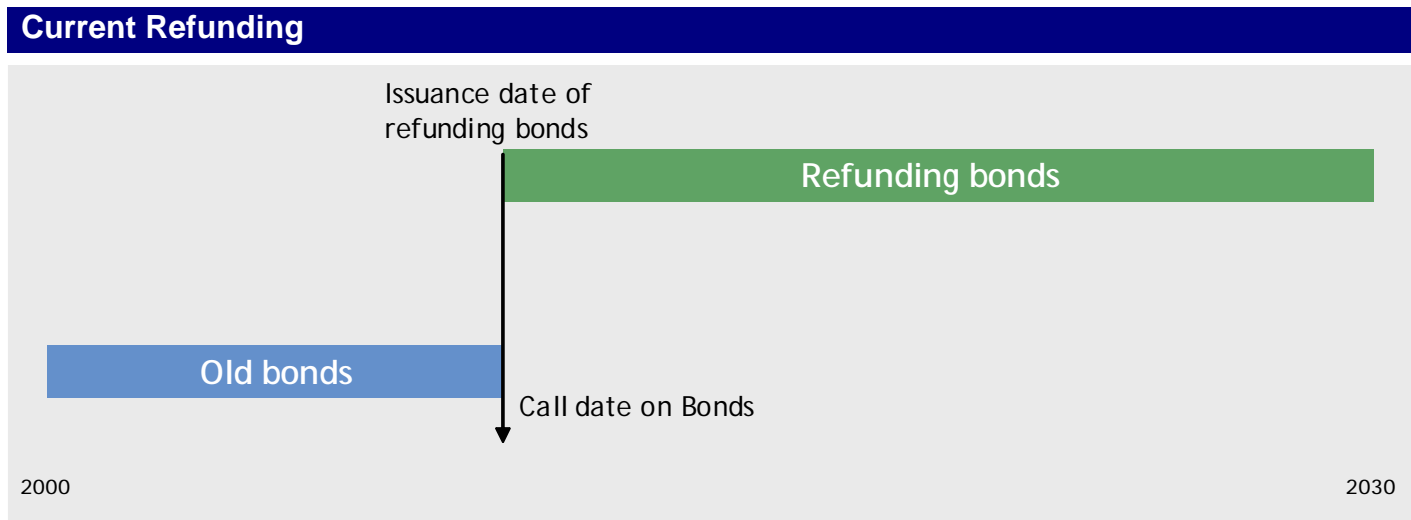


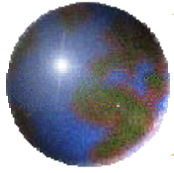
How to Execute a Refunding?



"Current" Refunding

Current refunding: A refinancing that occurs less than 90 days before the first call date of the existing bonds. A refunding is "current" if the refunding escrow period does not exceed 90 days.



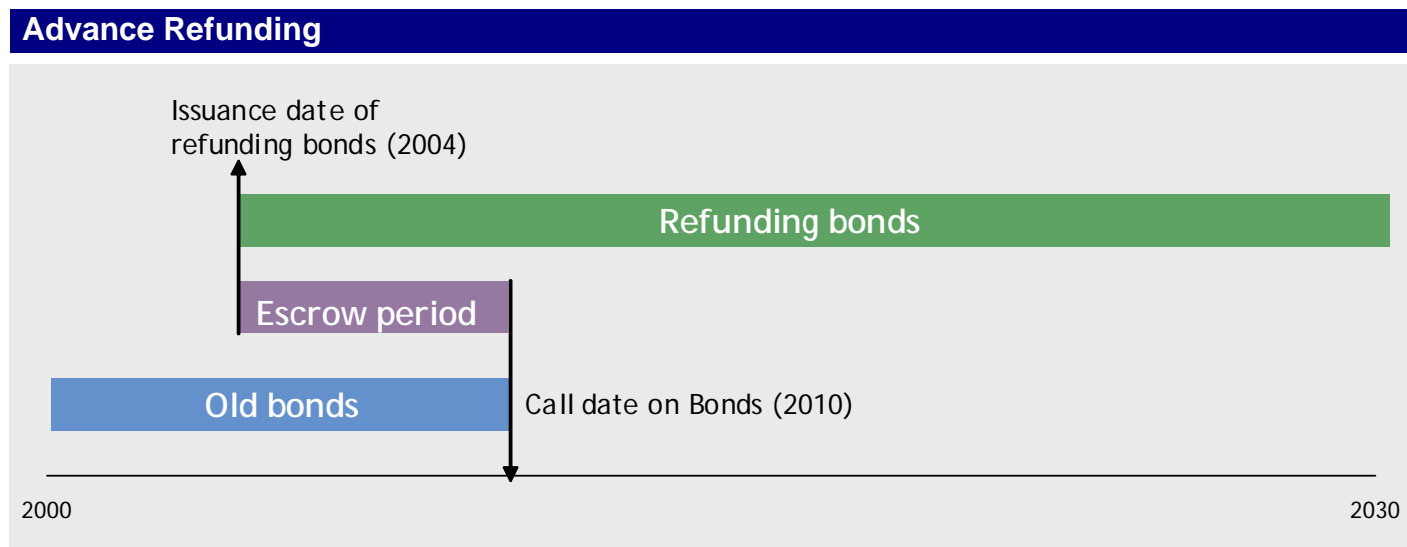


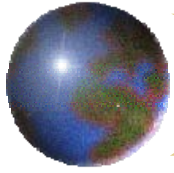
How to Execute a Refunding?



"Advance" Refunding

Advance refunding: A refinancing that occurs more than 90 days before the first call date on the existing bonds. Current tax law allows one advance refunding of municipal issues. There is no limit on current refundings.





How to Execute a Refunding?



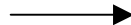
Sources and uses of sample refunding

Sources:

Bond Proceeds:	
Par Amount	88,555,000.00
Premium	8,842,556.25
	<hr/>
	97,397,556.25
	<hr/>

Uses:

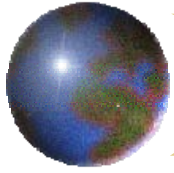
In a refunding transaction,
the majority of the funds are
deposited into the refunding
escrow



Refunding Escrow Deposits:	
Cash Deposit	1.18
SLG Purchases	96,864,489.00
	<hr/>
	96,864,490.18

Delivery Date Expenses:	
Cost of Issuance	200,000.00
Underwriter's Discount	332,081.25
	<hr/>
	532,081.25

Other Uses of Funds:	
Additional Proceeds	984.82
	<hr/>
	97,397,556.25
	<hr/>



How to Execute a Refunding?



Refunding Escrow

- An escrow account must be set up to
1) pay interest on the refunded bonds until the call date and 2) pay the principal and call premium of the refunded bonds on the call date
- For advance refundings, the composite yield on the securities purchased for the refunding escrow cannot exceed the arbitrage yield on the refunding bonds
- By purchasing a defeasance escrow for \$7,254,486 today, the issuer eliminates responsibility for its prior bonds and at the same time takes responsibility for the debt service on the refunding bonds

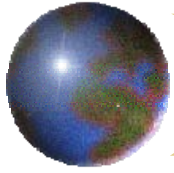
Date	Interest Cost	Par Amount	Call Premium	Present Value Cost
07/01/2007	245,000			237,864
07/01/2008	245,000			230,936
07/01/2009	245,000			224,210
07/01/2010	245,000	7,000,000	140,000	6,561,477
TOTALS	980,000	7,000,000	140,000	7,254,487

Prior coupon is 7.0%

Present value costs discounted at the arbitrage yield to the Refunding Date

This assumes no negative arbitrage - what if there is?

Similarly, home mortgage escrow accounts ensure that homeowners' escrow bills are paid in a timely fashion. They are a guarantee that there is always enough money to pay these bills when they are due. Escrow accounts automatically budget the borrower's tax and insurance responsibilities over a period of time.

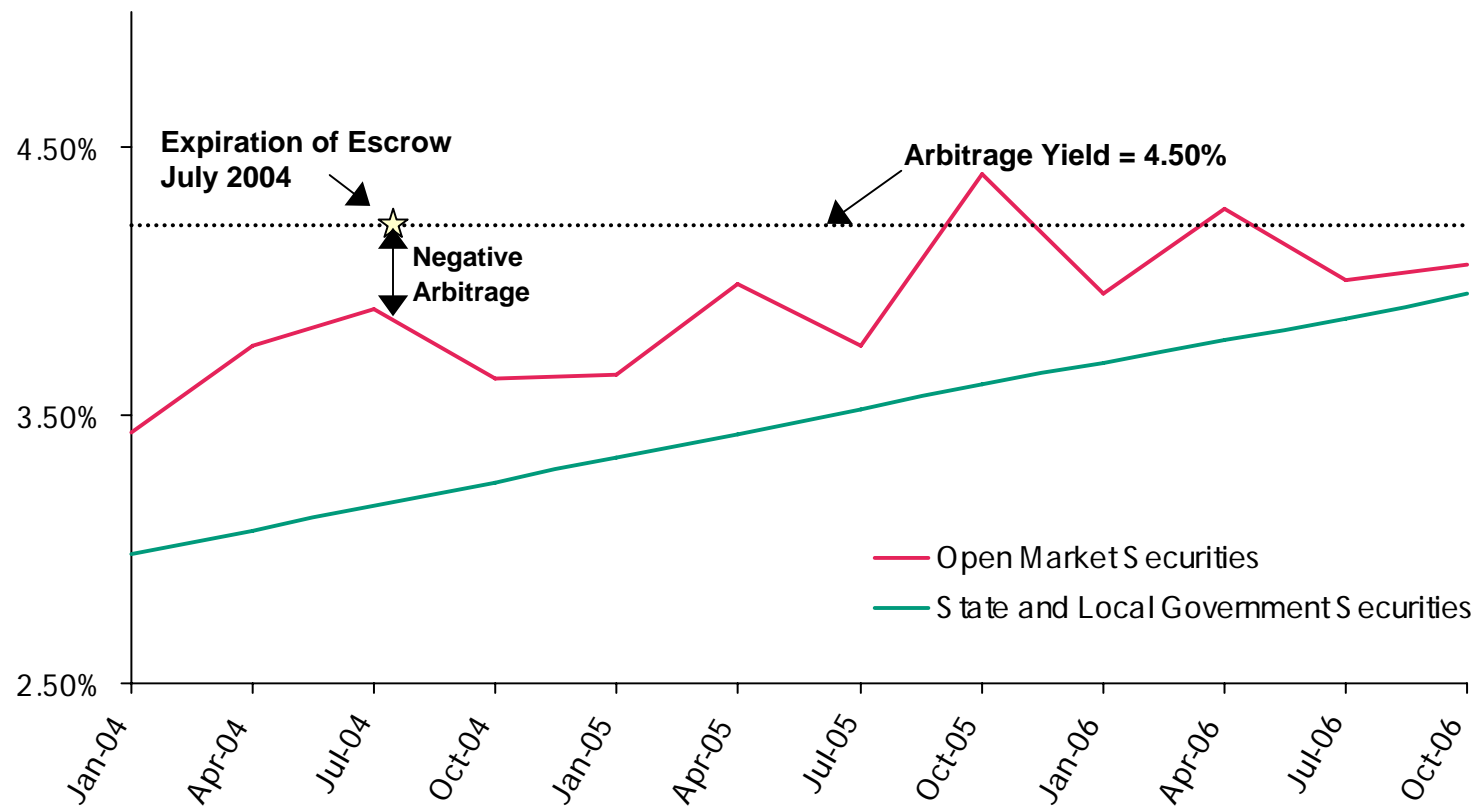


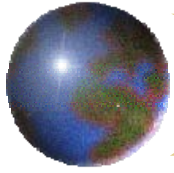
How to Execute a Refunding?



Negative Arbitrage

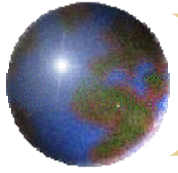
- Market yields earned on escrow deposits may not be able to equal the interest rate on the new bonds. This is defined as **negative arbitrage**.





Presentation Outline

- 1. Why Consider Refunding?**
- 2. How to Execute a Refunding**
- 3. Basic Refunding Issues**
 - a. Defeasance
 - b. Refunding Opportunities
 - c. Savings

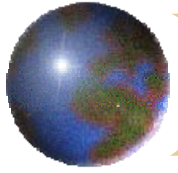


Basic Refunding Issues: Defeasance



Defeasance

- A defeasance is the termination of rights and interests of the bondholders and of their lien on an entity's pledged revenues for an issue of securities
- Defeasance usually occurs in connection with the refunding of an outstanding bond issue after provision has been made for future payment through funds provided by the issuance of a new series of bonds
 - Deposit sufficient funds to a trustee, pursuant to an escrow agreement, to pay principal, interest and call premiums on refunded bonds
 - An issuer can also defease bonds with cash

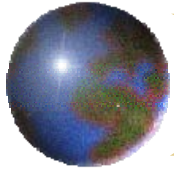


Basic Refunding Issues: Defeasance



Legal vs. Economic Defeasance

- **Legal defeasance**: The process by which debt may be eliminated for accounting purposes by depositing sufficient *non-callable direct U.S. Treasury securities* with a trustee pursuant to an irrevocable escrow agreement to pay all principal, interest, and call premiums (if any) as they become due on a bond issue
 - Debt may be removed from the balance sheet
 - The sufficiency of the escrow to meet debt service payments would need to be verified by a CPA firm to qualify for a legal defeasance
- **Economic defeasance**: The process by which debt may be eliminated by depositing sufficient securities with a trustee pursuant to an irrevocable escrow agreement to pay all principal, interest, and call premiums (if any) as they become due on a bond issue
 - Debt must remain on the balance sheet
 - Credit quality of the escrow securities is important to rating agencies and investors
 - Typical investments include U.S. Agency float contracts, guaranteed investment contracts, and repurchase agreements

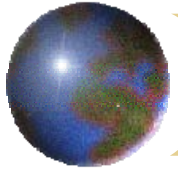


Basic Refunding Issues: Refunding Opportunity



Refunding Opportunity Indicators

- Some indications of possible refunding candidates include:
 - Interest rates on the prior bonds are significantly (i.e. 100+ basis points) higher than the current market interest rate the issuer can obtain with its credit
 - Prior bonds have at least 5+ years between the final maturity and the first available call date
- Example:
 - Bonds issued on July 1, 1998 are callable on July 1, 2008 at 102% of the par amount
 - Callable bonds have \$1,000,000 par amounts maturing on July 1, 2009 to July 1, 2018
 - Coupons for each maturity are 7.00%
 - Current market interest rates would allow new bonds to be sold with 6.00% interest rates

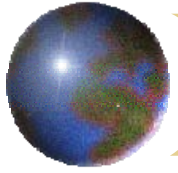


Basic Refunding Issues: Refunding Opportunity



Is A Refunding Worth Pursuing?

- The most common method to gauge savings from a refunding is to look at the present value savings as a percentage of bonds refunded
 - Benchmark percentages (i.e. 3%, 4% or 5%) serve as policy guidelines, but other considerations, such as budgetary, document changes, and/or administrative matters, may influence the decision
- As mentioned previously, some issuers may pursue a refunding without any savings or with dis-savings because of other needs

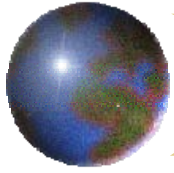


Basic Refunding Issues: Savings



Present Value Savings

- Present value is a tool for making decisions today
- Present value savings are calculated by discounting, at an agreed upon interest rate, the difference between the prior bond's and the refunding bond's debt service payments
- The discount rate is typically based on the all-in-TIC of the refunding bonds, although the arbitrage yield or another mutually agreed upon rate can be used



Basic Refunding Issues: Savings



Savings Pattern

- Debt service savings from refunding can be structured in various ways:

- Uniform
- Front-end
- Back-end
- Targeted relief
- Wrap around existing debt

Year	Prior Debt Service	Refunding Debt Service	Cash Flow Savings	Net PV Savings
2007	490,000	474,800	15,200	15,016
2008	490,000	472,700	17,300	16,276
2009	490,000	475,600	14,400	12,903
2010	490,000	473,200	16,800	14,337
2011	490,000	470,800	19,200	15,604
2012	1,490,000	1,473,400	16,600	12,849
2013	1,420,000	1,400,700	19,300	14,227
2014	1,350,000	1,333,600	16,400	11,514
2015	1,280,000	1,261,800	18,200	12,169
2016	1,210,000	1,190,600	19,400	12,354
2017	1,140,000	1,125,000	15,000	9,097
2018	1,070,000	1,054,700	15,300	8,837
TOTALS:	11,410,000	11,206,900	203,100	155,183

Assumes PV discount rate is 5%.

Fairly uniform savings pattern

